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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,198	08/21/2003	Rhonda L. Childress	AUS920020693US1	7111

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EXAMINER	
INGBERG, TODD D	
ART UNIT	**PAPER NUMBER**
2193	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/645,198	CHILDRESS ET AL.	
	Examiner	Art Unit	
	Todd Ingberg	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/21/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1 – 33 have been examined.

Information Disclosure Statement

1. The Information Disclosure Statement filed August 21, 2003 has been considered.

Drawings

2. Figure 1 is should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The Examiner notes an abnormality in the scanned record. A separate figure 4/4 is present in addition to the six pages of drawings. The Examiner would appreciate the Applicant resubmitting the formal drawings again to ensure the proper drawings are recognized in the electronic record.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Legal words such as "method" and "system" should be removed.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12 – 33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is for distributing software which is not a tangible result because is not clearly claimed to be tangibly embodied on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Using claim 12 as an example the following amendment would overcome the rejection for claim 12.

Claim 12
A data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said system comprising: a global computer system that is located in said global tier receiving a distribution request to distribute a file package to a target computer system that is located in said target tier;

said global computer system starting a distribution process in said hub computer system;

said global computer system distributing said file package and an installation process to said hub computer system that is located in said hub tier;

said hub computer system utilizing said distribution process to automatically distributing said file package and said installation process to said target computer system; and

said target computer system automatically installing said file package **on a computer readable medium** utilizing said installation process.

Examiner Observation

6. It is possible the claims Applicant intended to be dependent on claim 12 are not.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 12 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by the commercial product HP OpenView as documented in the 1995 book, Focus on HP OpenView.

Claim 1

A method in a data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said method comprising the steps of:

receiving, within a global computer system that is located in said global tier, a distribution request to distribute a file package to a target computer system that is located in said target tier; starting, by said global computer system, a distribution process in said hub computer system; distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier; automatically distributing said file package and said installation process to said target computer system from said hub computer system utilizing said distribution process; and

automatically installing, by said target computer system, said file package utilizing said installation process.

Rejection for Claim 1

OpenView anticipates automatically distributing and installing software file packages (HP, pages 184, Synchronization and Change Orchestration) throughout a multi-tiered computer architecture hierarchy (HP, Supports many topologies pages 210-216, 229-230, 246-250) , said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier (As per above and HP, pages 2 – 18), said method comprising the steps of:

receiving, within a global computer system that is located in said global tier, a distribution request to distribute a file package to a target computer system that is located in said target tier (HP, pages 179 – 182); starting, by said global computer system, a distribution process in said hub computer system; distributing said file package and an installation process (HP, pages 182 – Software Management) from said global computer system to said hub computer system that is located in said hub tier; automatically distributing said file package and said

installation process to said target computer system from said hub computer system utilizing said distribution process (as per the cited sections above); and

automatically installing, by said target computer system, said file package utilizing said installation process (HP, page 181, Target System).

Claim 12

A data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said system comprising: a global computer system that is located in said global tier receiving a distribution request to distribute a file package to a target computer system that is located in said target tier;

said global computer system starting a distribution process in said hub computer system;

said global computer system distributing said file package and an installation process to said hub computer system that is located in said hub tier;

said hub computer system utilizing said distribution process to automatically distributing said file package and said installation process to said target computer system; and

said target computer system automatically installing said file package utilizing said installation process. As per claim 1.

Claim 23

A computer program product in a data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said product comprising:

instruction means for receiving, within a global computer system that is located in said global tier, a distribution request to distribute a file package to a target computer system that is located in said target tier; instruction means for starting, by said global computer system, a distribution process in said hub computer system;

instruction means for distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier; instruction means for automatically distributing said file package and said installation process to said target computer system from said hub computer system utilizing said distribution process; and

instruction means for automatically installing, by said target computer system, said file package utilizing said installation process. As per claim 1.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 2 – 11, 13-22, and 24-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over OpenView in view of CORBA.

Motivation to Combine

OpenView from 1995 does not explicitly teach using the OMG standard CORBA. It is IBM a member of OMG who teaches the use of CORBA for distribution (CORBA, Chapter 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teaching of HP and CORBA, because, using an industry standard makes support more available.

Claim 2

The method according to claim 1, further comprising the steps of:

providing a three-tier CORBA network, said CORBA network including a hub CORBA ORB coupled to a second spoke CORBA ORB, and said spoke CORBA ORB being coupled to a gateway CORBA ORB, wherein said hub CORBA ORB occupies said hub tier of said architecture, said spoke CORBA ORB occupies a spoke tier of said architecture, said spoke tier between said hub tier and a gateway tier, and said gateway CORBA ORB occupies said gateway tier, said gateway tier being located between said gateway tier and said target tier; and coupling said global computer system to said three tier CORBA network, said global computer system occupies a top tier of said architecture over said first tier, said global computer system functioning as a CORBA ORB and treating said hub CORBA ORB as a managed node. (CORBA, Chapter2, topology).

Claim 3

The method according to claim 1, further comprising the steps of:

assigning a unique request identifier to said distribution request; and tracking processing of said distribution request as it is processed by said global computer system, said hub computer system, and said target computer system using said unique request identifier. (HP, page 244, SNMP, has unique Identifiers).

Claim 4

The method according to claim 1, further comprising the steps of:

determining by said global computer system whether said distribution of said file package and said installation process from said global computer system to said hub computer system was successful; in response to a determination that said distribution was unsuccessful, re-attempting said distribution. (HP, page 181, Monitor for success).

Claim 5

The method according to claim 1, further comprising the steps of:

including a queue within said global computer system for storing distribution requests;

in response to receiving said distribution request, placing said distribution request in said queue; and processing a next request from said queue utilizing said global computer system. . HP, Management Functions for Hub, pages 243 – 247, bullets on page 243

Claim 6

The method according to claim 5, further comprising the steps of:

determining by said global computer system whether said distribution of said file package and said installation process from said global computer system to said hub computer system was successful; in response to a determination that said distribution was unsuccessful, re-queueing said distribution request by restoring said distribution request in said queue; and said global computer system making another attempt to distribute said distribution request without requiring that said distribution request be resubmitted to said global computer system. . HP, Management Functions for Hub, pages 243 – 247, bullets on page 243

Claim 7

The method according to claim 1, further comprising the steps of:

in response to receiving said distribution request within said global computer system, locking, by said global computer system, said hub computer system to prevent said hub computer system from processing other requests while said hub computer system is processing said distribution request. . HP, Management Functions for Hub, pages 243 – 247, bullets on page 243.

Claim 8

The method according to claim 7, further comprising the steps of: locking said hub computer system using a unique request identifier that identifies said distribution request. HP, Management Functions for Hub, pages 243 – 247, bullets on page 243

Claim 9

The method according to claim 7, further comprising the steps of:

determining whether said hub computer system is available prior to said global computer system locking said hub computer system; in response to a determination that said hub computer system is unavailable, waiting until said hub computer system becomes available; and

in response to a determination that said hub computer system is available, locking said hub computer system. HP, Management Functions for Hub, pages 243 – 247, bullets on page 243

Claim 10

The method according to claim 1, further comprising the steps of:

including a plurality of file package requests within said distribution request, each one of said file package requests being a request to either install a particular file package or remove a particular file package; and including in said distribution request an installation script for each one of said file requests that is a request to install a particular file package. HP, page 182 remove and install on target.

Claim 11

The method according to claim 1, further comprising the steps of:

receiving, within said global computer system that is located in said global tier, a distribution request to distribute a plurality of file package requests to a target computer system that is in said target tier; each one of said file package requests being a request to either install a particular file package on said target or to remove a particular file package from said target; including in said distribution request an installation script for each one of said file requests that is a request to install a particular file package; starting, by said global computer system, a distribution process in said hub computer system; distributing said plurality of file packages and an installation process from said global computer system to said hub computer system that is located in said hub tier; utilizing said distribution process within said hub to automatically distribute to said target computer system ones of said file package requests that are requests to remove a particular file package from said target computer system; automatically removing, by said target computer system, said particular file for each of said ones of said file package requests that are requests to remove a particular file; utilizing said distribution process within said hub to automatically distribute to said target computer system ones of said file package requests that are requests to install a particular file package on said target computer system;

automatically installing, by said target computer system, said particular file for each of said ones of said file package requests that are requests to install a particular file; and said removal requests being executed prior to said installation requests. As per claim 1 and HP, page 182 remove and install on target.

Claim 13

The system according to claim 12, further comprising:

a three-tier CORBA network, said CORBA network including a hub CORBA ORB coupled to a second spoke CORBA ORB, and said spoke CORBA ORB being coupled to a gateway CORBA ORB, wherein said hub CORBA ORB occupies said hub tier of said architecture, said spoke CORBA ORB occupies a spoke tier of said architecture, said spoke tier between said hub tier and a gateway tier, and said gateway CORBA ORB occupies said gateway tier, said gateway tier being located between said gateway tier and said target tier; and said global computer system coupled to said three tier CORBA network, said global computer system occupies a top tier of said architecture over said first tier, said global computer system functioning as a CORBA ORB and treating said hub CORBA ORB as a managed node. As per claim 2.

Claim 14

The system according to claim 11, further comprising: a unique request identifier assigned to said distribution request; and said unique request identifier for tracking processing of said distribution request as it is processed by said global computer system, said hub computer system, and said target computer system. As per claim 3.

Claim 15

The system according to claim 11, further comprising: said global computer system determining whether said distribution of said file package and said installation process from said global computer system to said hub computer system was successful; in response to a determination that

said distribution was unsuccessful, said global computer system re-attempting said distribution. As per claim 4.

Claim 16
The system according to claim 11, further comprising: a queue included within said global computer system for storing distribution requests; in response to receiving said distribution request, said distribution request being placed in said queue; and said global computer system processing a next request from said queue. As per claim 5.

Claim 17
The system according to claim 16, further comprising: said global computer system determining whether said distribution of said file package and said installation process from said global computer system to said hub computer system was successful; in response to a determination that said distribution was unsuccessful, said distribution request being re-queueing said distribution request by restoring said distribution request in said queue; and said global computer system making another attempt to distribute said distribution request without requiring that said distribution request be resubmitted to said global computer system. As per claim 6.

Claim 18
The system according to claim 11, further comprising: in response to receiving said distribution request within said global computer system, said global computer system locking said hub computer system to prevent said hub computer system from processing other requests while said hub computer system is processing said distribution request. As per claim 7.

Claim 19
The system according to claim 18, further comprising: said hub computer system being locked using a unique request identifier that identifies said distribution request. as per claim 8.

Claim 20
The system according to claim 18, further comprising: said global computer system determining whether said hub computer system is available prior to said global computer system locking said hub computer system; in response to a determination that said hub computer system is unavailable, said global computer system waiting until said hub computer system becomes available; and in response to a determination that said hub computer system is available, said global computer system locking said hub computer system. As per claim 9.

Claim 21
The system according to claim 11, further comprising: said distribution request including a plurality of file package requests,-each one of said file package requests being a request to either install a particular file package or remove a particular file package; and said distribution request including an installation script for each one of said file requests that is a request to install a particular file package. As per claim 10.

Claim 22

The system according to claim 11, further comprising: said global computer system that is located in said global tier receiving a distribution request to distribute a plurality of file package requests to a target computer system that is in said target tier; each one of said file package requests being a request to either install a particular file package on said target or to remove a particular file package from said target; said distribution request including an installation script for each one of said file requests that is a request to install a particular file package;

said global computer system starting a distribution process in said hub computer system;

said global computer system distributing said plurality of file packages and an installation process to said hub computer system that is located in said hub tier;

said hub computer system utilizing said distribution process included in said hub computer system to automatically distribute to said target computer system ones of said file package requests that are requests to remove a particular file package from said target computer system; said target computer system automatically removing said particular file for each of said ones of said file package requests that are requests to remove a particular file;

said hub computer system utilizing said distribution process within said hub computer system to automatically distribute to said target computer system ones of said file

package requests that are requests to install a particular file package on said target computer system; said target computer system automatically installing said

particular file for each of said ones of said file package requests that are requests to install a particular file; and said removal requests being executed prior to said installation requests. As per claim 11.

Claim 24

The product according to claim 23, further comprising: a three-tier CORBA network, said CORBA network including a hub CORBA ORB coupled to a second spoke CORBA ORB, and said spoke CORBA ORB being coupled to a gateway CORBA ORB, wherein said hub CORBA ORB occupies said hub tier of said architecture, said spoke CORBA ORB occupies a spoke tier of said architecture, said spoke tier between said hub tier and a gateway tier, and said gateway CORBA ORB occupies said gateway tier, said gateway tier being located between said gateway tier and said target tier; and instruction means for coupling said global computer system to said three-tier CORBA network, said global computer system occupies a top tier of said architecture over said first tier, said global computer system functioning as a CORBA ORB and treating said hub CORBA ORB as a managed node. As per claim 2.

Claim 25

The product according to claim 23, further comprising: instruction means for assigning a unique request identifier to said distribution request; and instruction means for tracking processing of said distribution request as it is processed by said global computer system, said hub computer system, and said target computer system using said unique request identifier. As per claim 3.

Claim 26

The product according to claim 23, further comprising: instruction means for determining by said global computer system whether said distribution of said file package and said installation

process from said global computer system to said hub computer system was successful; in response to a determination that said distribution was unsuccessful, instruction means for re attempting said distribution. As per claim 4.

Claim 27
The product according to claim 23, further comprising: instruction means for including a queue within said global computer system for storing distribution requests; in response to receiving said distribution request, instruction means for placing said distribution request in said queue; and instruction means for processing a next request from said queue utilizing said global computer system. As per claim 5.

Claim 28
The product according to claim 27, further comprising: instruction means for determining by said global computer system whether said distribution of said file package and said installation process from said global computer system to said hub computer system was successful; in response to a determination that said distribution was unsuccessful, instruction means for requeueing said distribution request by restoring said distribution request in said queue; and said global computer system making another attempt to distribute said distribution request without requiring that said distribution request be resubmitted to said global computer system. As per claim 6.

Claim 29
The product according to claim 23, further comprising: in response to receiving said distribution request within said global computer system, instruction means for locking, by said global computer system, said hub computer system to prevent said hub computer system from processing other requests while said hub computer system is processing said distribution request. As per claim 7.

Claim 30
The product according to claim 29, further comprising: instruction means for locking said hub computer system using a unique request identifier that identifies said distribution request. As per claim 8.

Claim 31
The product according to claim 29, further comprising:
instruction means for determining whether said hub computer system is available prior to said global computer system locking said hub computer system; in response to a determination that said hub computer system is unavailable, instruction means for waiting until said hub computer system becomes available; and in response to a determination that said hub computer system is available, instruction means for locking said hub computer system. As per claim 9.

Claim 32
The product according to claim 23, further comprising: instruction means for including a plurality of file package requests within said distribution request, each one of said file package

requests being a request to either install a particular file package or remove a particular file package; and instruction means for including in said distribution request an installation script for each one of said file requests that is a request to install a particular file package. As per claim 10.

Claim 33

The product according to claim 23, further comprising:
instruction means for receiving, within said global computer system that is located in said global tier, a distribution request to distribute a plurality of file package requests to a target computer system that is in said target tier; each one of said file package requests being a request to either install a particular file package on said target or to remove a particular file package from said target; instruction means for including in said distribution request an installation script for each one of said file requests that is a request to install a particular file package; instruction means for starting, by said global computer system, a distribution process in said hub computer system; instruction means for distributing said plurality of file packages and an installation process from said global computer system to said hub computer system that is located in said hub tier; instruction means for utilizing said distribution process within said hub to automatically distribute to said target computer system ones of said file package requests that are requests to remove a particular file package from said target computer system; instruction means for automatically removing, by said target computer system, said particular file for each of said ones of said file package requests that are requests to remove a particular file;

instruction means for utilizing said distribution process within said hub to automatically distribute to said target computer system ones of said file package requests that are requests to install a particular file package on said target computer system; instruction means for automatically installing, by said target computer system, said particular file for each of said ones of said file package requests that are requests to install a particular file; and said removal requests being executed prior to said installation requests. As per claim 11.

Examiner Comment

11. The ***"distribution request"*** is nebulous as to the origin in the claims.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Todd Ingberg
Primary Examiner
Art Unit 2193

TI